

What I claim as my invention is:

1. A method, of using a web browser for electronic shopping on a computer, that upon a selection or a change of quantity of an item on at least one order page or on at least one order summary page, calculates specified transaction amounts and records selected item data without browser load or reload. (914-924, 934-940, 955-962)
 2. The method of claim 1, wherein said item refers to any product or any service, described or displayed by text, graphics, images, sound, and video, or any combination thereof.
 3. The method of claim 1, wherein recorded item data is adapted a vendor's particular needs.
 4. The method of claim 3, wherein said recorded item data is either temporary for order session or persistent across multiple order sessions. (1041-1052, 1141-1158, 1240-1252, 1301-1320)
 5. The method of claim 3, optionally comprising a method of recording with said recorded item data, the time of making said selection or change.
 6. Further to method of claim 1, upon loading any order page or any order summary page, a method that recalls the quantity of previously selected item(s) from said recorded item data and displaying said specified transaction amounts. (1020-1032, 1121-1133, 1220-1236)
 7. Further to method of claim 6, wherein said specified transaction amounts are calculated using values from all said recorded item data. (930-940, 950-962)
 8. Further to method of claim 1, an optional method of calculating of said specified transaction amounts for at least one order page using a running subtotal based on each change of page total. (910-924)
 9. Further to the method of claim 8, a method of detecting browser error and correcting said value comprising the steps of:
 - a) optionally issuing an instruction for user to load a page with a calculation based on said recorded item data ; and (922)
 - b) recording for subsequent calculations said value derived from said recorded item data. (1210)
 10. The method of claim 1, wherein said order page displays of at least one item for said selection or change of item quantity.
 11. The method of claim 1, wherein said order summary page, displays all selected item(s).
 12. Further to method of claim 1, an optional method of providing item descriptive name, item price, and item preview image with immediate access to item detailed information.

13. The method of claim 1, further comprising a method of providing elements to access any said order page and any said order summary page.

14. Further to method of claim 1, an optional method of assigning zero price to all items, thereby effectively recording item quantity selections for subsequent completion of a transaction.

15. Further to method of claim 1, an optional method of initiating or deferring the calculation of said specified transaction amounts and recording of said selected item data until or just before browser document unload. (970)

16. A method for web pages to reduce the time required to select or change a quantity of an item comprising for quantity adjustment; an input element for each item quantity(901), hyperlinked element(s) (902, 903,225) and code segment for increment and decrement of item quantity; and further comprising, upon a single user action on said hyperlinked element the steps of:

- a) determining item quantity from said input element;
- b) either increments or decrements of item quantity by a predetermined amount;
- c) setting item quantity to zero if it is not a positive value; and
- d) displaying resultant item quantity in said input element:

the steps being performed without browser load or reload.

17. Further to claim 16, wherein said single user action is a mouse click or any pointing device equivalent.

18. Further to claim 16, wherein said quantity may refer to a currency unit.

19. Further to claim 16, an optional method comprising coupling of transaction calculations to said quantity adjustment component.

20. A method, upon an order page load, comprising the steps of:

- a) recalling previously selected item(s) for said order page; (910)
- b) calculating and recording order page total ; (911)
- c) recalling a recorded value for subsequent calculations; and (912)
- d) displaying specified transaction amounts; and, (913)

further comprising, for selection of an item or a change of item quantity on said order page, the steps of: (915)

- e) calculating and optional display of item amount ; (916)
- f) recording revised current item selection; (917)
- g) calculating new order page total ; (918)
- h) calculating change in order page total ; (919)
- i) recording new order page total ; (920)
- j) addition to running subtotal of order, said change in order page total; (921)
- k) optional alert for browser error (922)
- l) calculating and recording a revised value for subsequent calculations; (923)
- m) displaying specified transaction amounts; (924) and
- n) repeating steps e) through m) for each subsequent selection or change in item quantity:

the latter steps being performed without browser load or reload.

21. Further to method of claim 20, an optional list format category order page, one of a plurality of formats adapted to a vendor's needs, comprising:

- A. web page elements to specify and list a plurality of items for selection with description name and price for each item; (202)
- B. input element for each item quantity; (203)
- C. display element for each item amount ; (205) and
- D. display element for said order page total. (210)

22. The claim of 21, further comprising an optional access to each item's detailed description page.

23. The claim of 21, further comprising an optional method for finding and selecting items, that displays an item preview image in a preview window (105) when the mouse pointer moves over an item description name.

24. The claim of 23, optionally comprising a method of advertising by displaying additional images in said preview window while it is not being used to display said item preview image(s).

25. The claim of 21, further comprising upon page load, an optional pictorial display of previously selected category items. (208)

26. The claim of 25, further comprising an update of said pictorial display of previously selected category items, that displays an intermediate referring page. (206)

27. The claim of 26, optionally comprising a method of advertising displaying information on said intermediate referring page.

28. The claim of 27, wherein said information is presented utilizing any web page element.

29. Further to the method of claim 20, an optional picture format category order page, one of a plurality of formats adapted to vendors needs, comprising:

- A. web page elements to specify and display a plurality of items for selection with an item image for each item; (225)
- B. input element for each item quantity; (226)
- C. non displayed element for each item amount; and
- D. display element for said order page total. (230)

30. The claim of 29, further comprising an optional access element to each item's detailed description page. (223)

31. The claim of 30, further comprising an optional display of item status information on said access element. (224)

32. The claim of 31, wherein said optional display is a mouse-over rollover image.

33. Further to the method of claim 20, an optional item detailed description order page adapted to vendors needs, one of a plurality, each comprising:

- A. an item for selection with price; (311)
- B. input element for item quantity; (313)
- C. optional display element for item amount; (315) and
- D. additional information and web page elements to display, and describe said item. (312, 317)

34. Further to the method of claim 20, wherein a vendor can choose to include any number of said optional order pages of claim 21, 29 and 33 adapted to vendors needs.

35. A method, upon a order summary page load, comprising the steps of:

- a) recalling all previously selected item(s); (930)
- b) optionally informing a user of detected errors if any; (1223, 1224)
- c) calculating order subtotal ; (931)
- d) optionally recording a value for subsequent calculations; (932)
- e) displaying specified transaction amounts; (933) and
- f) reloading said order summary page once, using an intermediate referring page (1215) and further comprising, for a selection of an item or a change of item quantity on said order summary page, the steps of: (935)
 - g) calculating and optional display of said resultant item amount; (936)
 - h) recording said revised item selection; (937)
 - i) calculating said subtotal using all previously selected items for order subtotal. (938)
 - j) optionally recording said value for subsequent calculations; (939)
 - k) displaying said specified transaction amounts; (940) and
 - l) repeating steps g) through k) for each subsequent selection or change in item quantity: the latter steps being performed without browser load or reload.

36. Further to the method of claim 35, to complete a transaction at least one order summary page adapted to vendors needs comprising:

- A. web page elements to specify and list all selected items each with an item description, and item price; (404, 405)
- B. elements for adjustment of each item's quantity; (403)
- C. display element(s) for item amount (s); (406)
- D. display elements for all transaction amounts; (407-410)
- E. an optional element to remove zero quantity entries; (411) and
- F. information of additional and web page elements to complete a transaction. (413-417)

37. Further to claim 36, an optional element to access each item's detailed description page.

38. Further to claim 36, an optional method for confirming items, that displays an item preview image in a preview window (105) when the mouse pointer moves over an item description name.

39. Further to claim 38, optionally comprising a method of advertising by displaying additional images in said preview window while it is not being used to display said item preview image(s).

40. Further to claim 36, an optional method of removing zero quantity entries by using an intermediate referring page to reload said order summary page.

41. The claim of 40, optionally comprising a method of advertising displaying information on said intermediate referring page.

42. Further to claim 36, wherein a vendor may use said order summary page as an Invoice.

43. Further to the method of claim 35, an optional picture format order summary page, one of a plurality of formats, for review of items ordered comprising:

- A. web page elements to specify and display all previously selected items each with an item image;
- B. elements for adjustment of each item's quantity; and
- C. non displayed element for each item amount.

44. The claim of 43, further comprising an optional access element to each item's detailed description page.

45. The claim of 43, further comprising an optional display of item status information on said access element.

46. The claim of 35, optionally comprising a method of advertising displaying information on said intermediate referring page during order summary page load.

47. A method, upon an order page load, comprising the steps of:

- a) recalling previously selected item(s) for said order page; (950)
- b) optionally calculating and displaying order page total; (951)
- c) recalling all previously selected item(s) from all categories; (952)
- d) optionally informing a user of all detected errors; (1064, 1065)
- e) calculating order subtotal using all recalled items; (953)
- f) displaying specified transaction amounts; (954) and

further comprising, for a selection of an item or a change of item quantity(956) on said order page, the steps of:

- g) optional calculating and displaying of said resultant item amount ; (957)
- h) optionally calculating and displaying order page total (958)
- i) recording revised item selection; (959)
- j) recalling all previously selected item(s) from all categories; (960)
- k) optionally informing said user of all detected errors; (1064, 1065)
- l) calculating order subtotal using all recalled items; (961)
- m) displaying specified transaction amounts; (962) and
- n) repeating steps g) through m) for each subsequent selection or change in item quantity:

the latter steps being performed without browser load or reload.

48. Further to method of claim 47, an optional list format category order page, one of a plurality of formats adapted to a vendor's needs, comprising:

- A. web page elements to specify and list a plurality of items for selection with description name and price for each item; (202)
- B. input element for each item quantity; (203)
- C. optional display element for each item amount ; (205) and
- D. optional display element for said category order page total. (210)

49. The claim of 48, further comprising an optional element to access each item's detailed description page.

50. The claim of 48, further comprising an optional method for finding and selecting items, that displays an item preview image in a preview window (105) when the mouse pointer moves over an item description name.

51. The claim of 50, optionally comprising a method of advertising by displaying additional images in said preview window while it is not being used to display said item preview image(s).

52. The claim of 48, further comprising upon page load, an optional pictorial display of previously selected category items. (208)

53. The claim of 52, further comprising an update of said pictorial display of previously selected category items, that displays an intermediate referring page. (206)

54. The claim of 53, optionally comprising a method of advertising displaying information on said intermediate referring page.

55. The claim of 54, wherein said information is presented utilizing any web page element.

56. Further to the method of claim 47, an optional picture format category order page in, one of a plurality of formats adapted to vendors needs, comprising:

- A. web page elements to specify and display a plurality of items for selection with an item image for each item; (225)
- B. input element for each item quantity; (226)
- C. optional non displayed element for item amount; and
- D. optional display element for said category order page total. (230)

57. The claim of 56, further comprising an optional access element to each item's detailed description page. (223)

58. The claim of 57, further comprising an optional display of item status information on said access element. (224)

59. Further to the method of claim 47, an optional item detailed description order page, adapted to vendors needs, one of a plurality, each comprising:

- A. an item for selection with price; (311)
- B. input element for item quantity; (313)
- C. optional display element for item amount; (315) and
- D. additional information and web page elements to display, and describe said item. (312, 317)

60. Further to the method of claim 47, wherein a vendor can choose to include of any number of said optional order pages of claim 48, 56, and 59 adapted to vendors needs.

61. A system for electronic shopping on-line with a web browser comprising:

a network (825);

at least one vendor computer (810), associated with at least one vendor and comprising at least processor (811), memory (812) and web server software (815) configured to host web pages and execute transactions (817), that is connected (813) to said network;

at least one client computer (830), associated with at least one user and comprising at least a processor (832), memory (833) and a web browser (840) configured to access and communicate over said network, that is connected (831) to said network; and

further comprising at least one order page and at least one order summary page, in at least one browser window with or without frames, and elements configured to provide access to any page.

62. The system of claim 61, wherein said network is selected from a group consisting of; intranet, local area networks, wide area networks, and the Internet.

63. The system of claim 61, wherein a selection or change of item(s) quantity is recorded and specified transaction amounts are calculated without browser load or reload.

64. The system of claim 61, wherein said order page(s) or said order summary page(s) upon load, recall previously selected item quantities from recorded item data and display specified transaction amounts.

65. The system of claim 61, wherein said order summary page comprises: instructions and information needed to complete a transaction; and elements for transmission to said vendor.

66. The system of claim 61, wherein said vendor computer(s) optionally comprises: at least one item database (818), for at least one vendor, and a search engine for query (600-602) of said item database(s).

67. The claim of 66, wherein said query displays item(s) on order page for immediate selection of any quantity.

68. The system of claim 61, wherein said vendor computer(s) optionally comprises a customized component (820), for orders in excess of browser capability, using minimal recorded data received from said client to generate full item specification for at least one order summary page.

69. The system of claim 61, wherein said vendor computer(s) optionally comprises, for statistical marketing analysis, time logs (821) of user page downloads to be used with recorded time of making selection or change of an item.

70. An article of manufacture for use in a computer, comprising:

a portable computer medium having computer readable program code means embodied therein for a system for electronic shopping on a web browser;

code segments for at least one order page, and at least one order summary page with instructions and information needed to complete a transaction, in at least one browser window with or without frames;

code segments for a method that records, without browser load or reload, selection or change of an item quantity and displays specified transaction amounts;

code segments for a method of recalling, upon any order page or any order summary page load, the quantity of previously selected item(s) from recorded item data;

code segments for a method of displaying, upon any order page or any order summary page load, specified transaction amounts;

code segments for elements providing access to any page in said system;

optionally, code segments for at least one item database, for at least one vendor;

optionally, code segments for a search engine for at least one query of said item database(s);

optionally, code segments for said query that display item(s) on order page for immediate selection of any quantity; and

optionally, code segments for a customized component, for orders in excess of browser capability, using minimal recorded data received from said client to generate full item specification for at least one order summary page.

71. Further to article of manufacture of claim 70, wherein a client computer on-line obtains partial item information (834) from said portable computer medium and the remainder from a vendor server on a network.

72. Further to article of manufacture of claim 70, wherein said client computer off-line derives all item information from said portable computer medium and said transaction is completed by faxing or by printing and mailing said order summary page.

Modification to Claim 16

16. The method of claim 1, further comprising an optional method for web pages to reduce the time required to select or change a quantity of an item comprising for quantity adjustment; an input element for each item quantity(901), hyperlinked element(s) (902, 903,225) and code segment for increment and decrement of item quantity; and further comprising, upon a single user action on said hyperlinked element the steps of:

- a) determining item quantity from said input element;
- b) either increments or decrements of item quantity by a predetermined amount;
- c) setting item quantity to zero if it is not a positive value; and
- d) displaying resultant item quantity in said input element:

the steps being performed without browser load or reload.

17. Further to claim 16, wherein said single user action is a mouse click or any pointing device equivalent.

18. Further to claim 16, wherein said quantity may refer to a currency unit.

19. Further to claim 16, an optional method comprising coupling of transaction calculations to said quantity adjustment component.

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